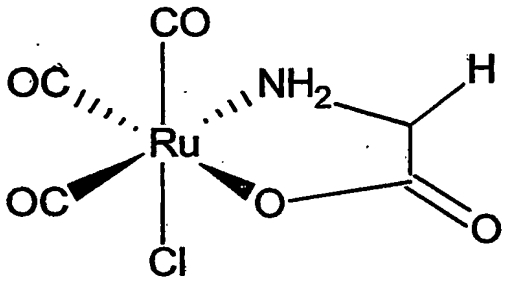


Ru(CO)3, Cl– Glycinate

(CORM-3)

Fig. 1A

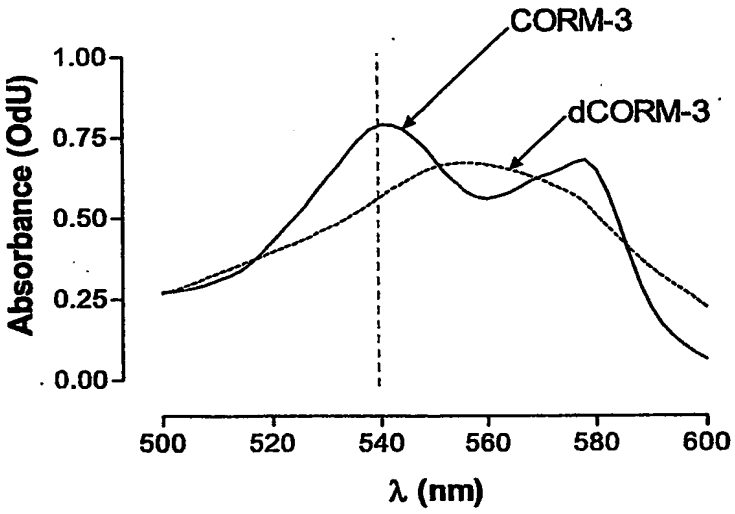


Fig. 1B

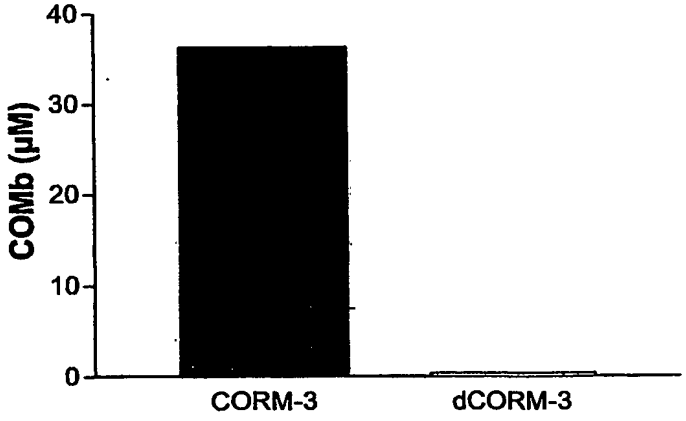


Fig. 1C

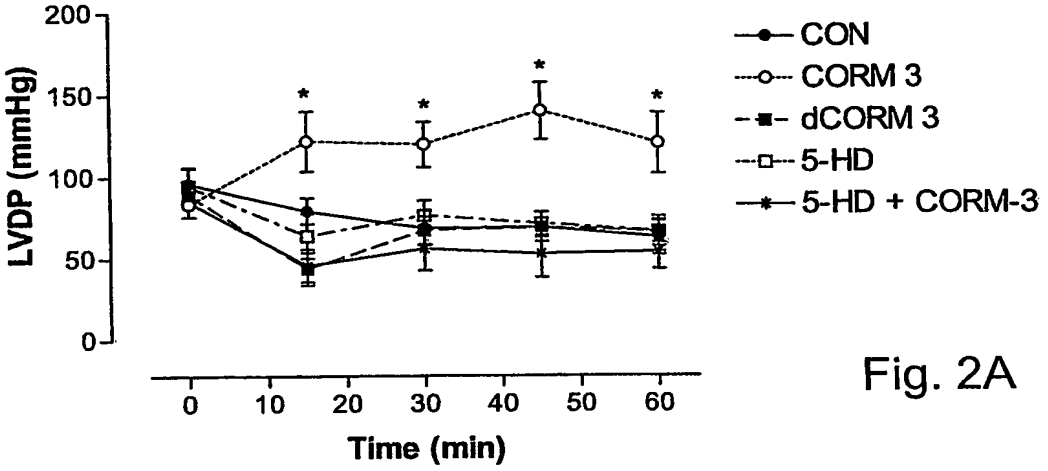


Fig. 2A

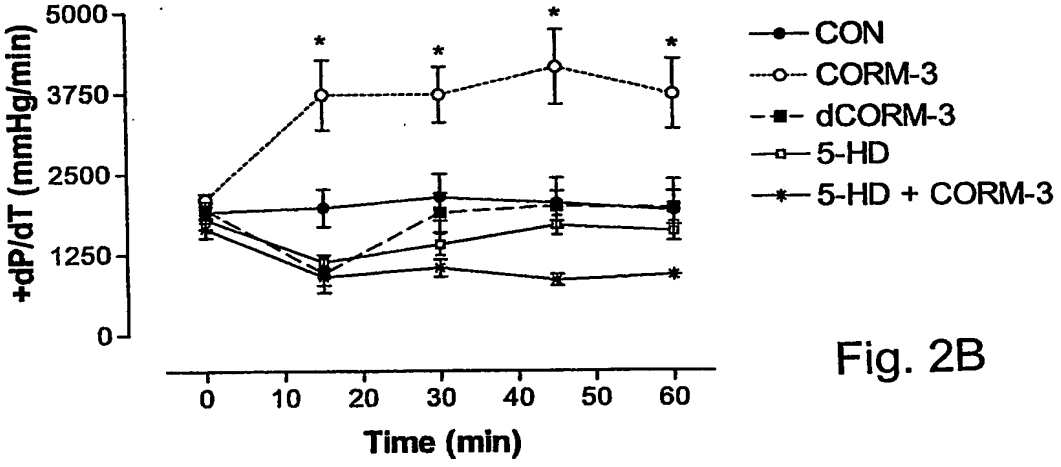


Fig. 2B

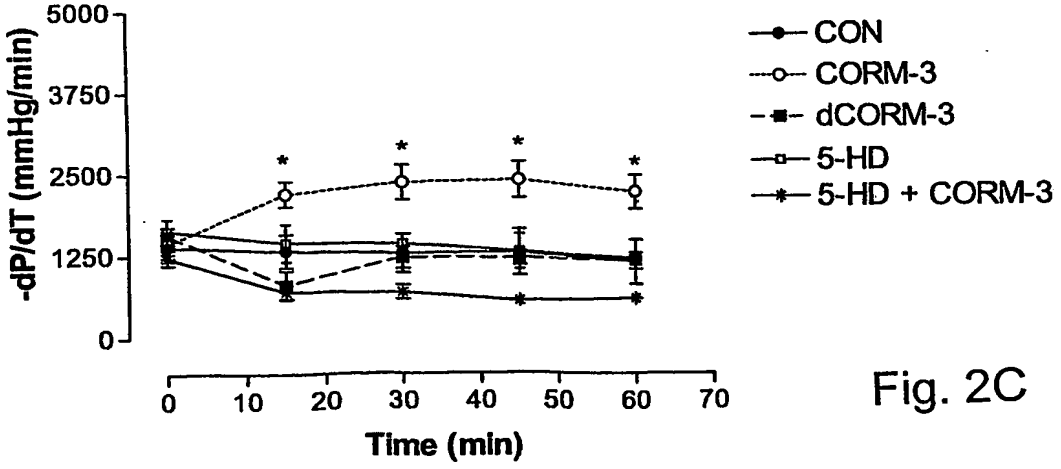


Fig. 2C

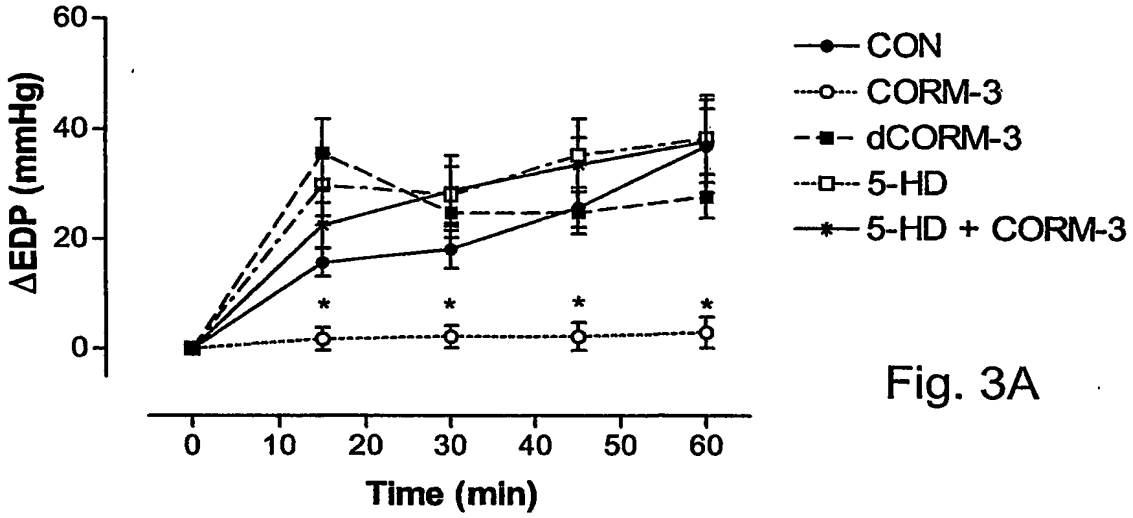

60
40
20
0
ΔEDP (mmHg)
0
10
20
30
40
50
60
Time (min)
CON
CORM-3
dCORM-3
5-HD
5-HD + CORM-3

Fig. 3A

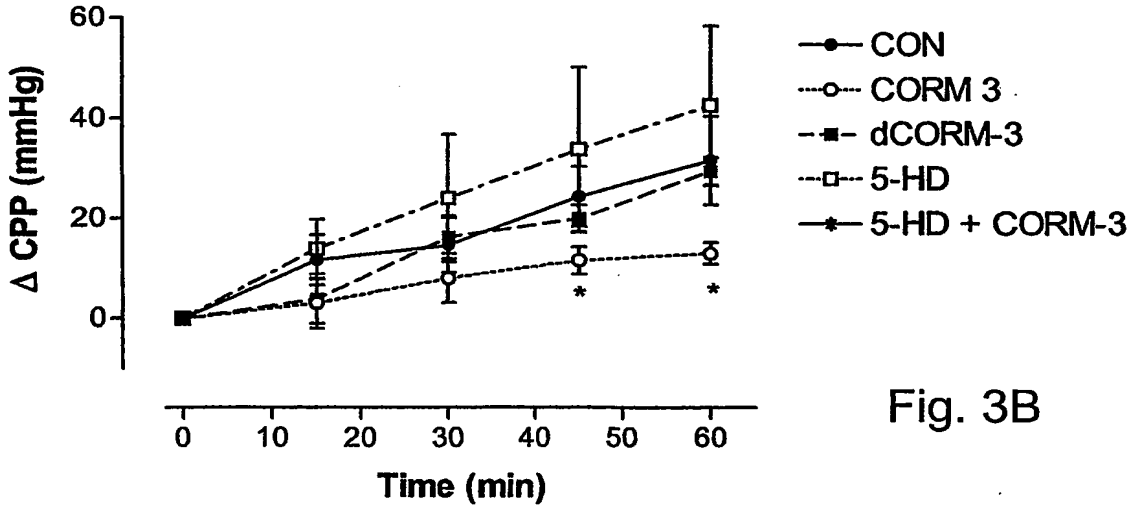

60
40
20
0
Δ CPP (mmHg)
0
10
20
30
40
50
60
Time (min)
CON
CORM 3
dCORM-3
5-HD
5-HD + CORM-3

Fig. 3B

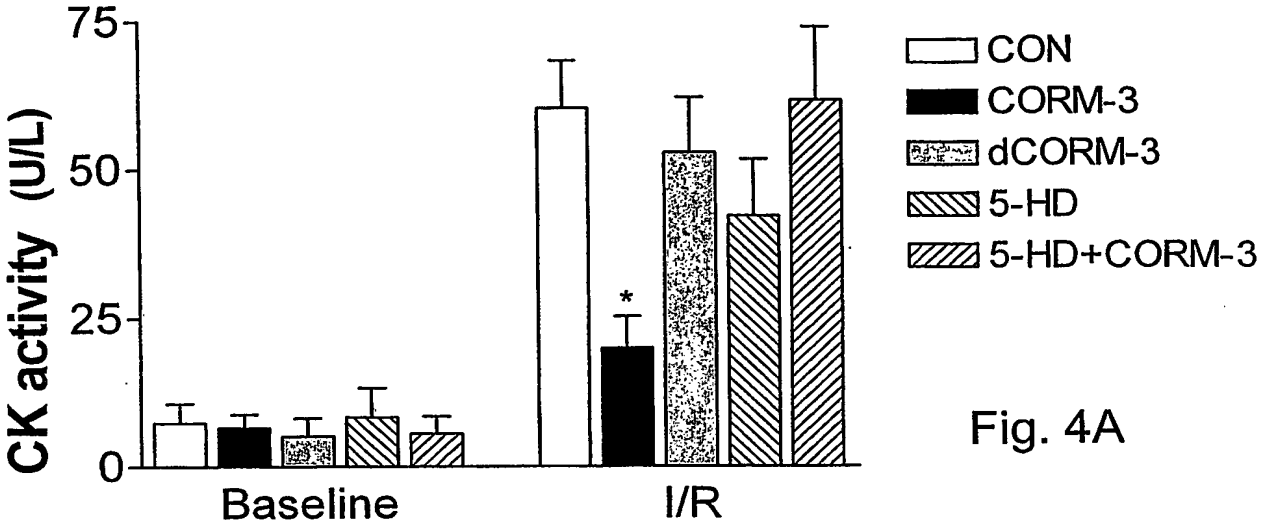


Fig. 4A

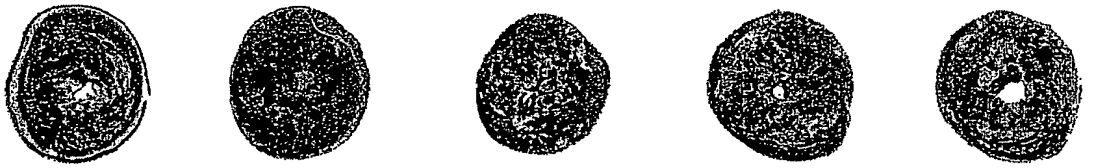


Fig. 4B

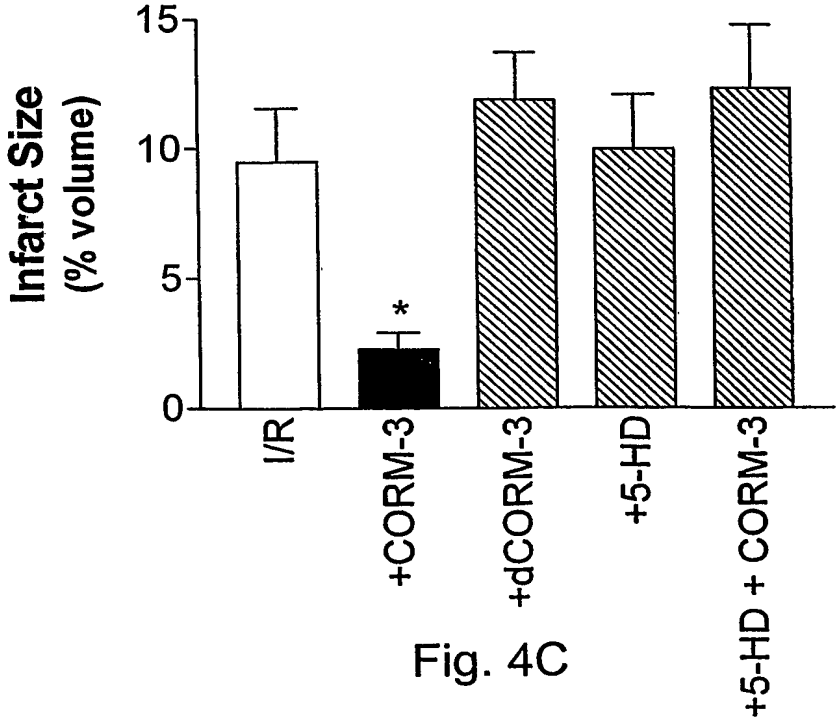


Fig. 4C

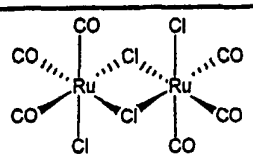
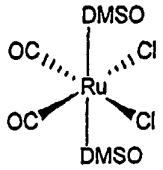
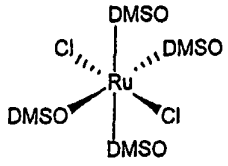
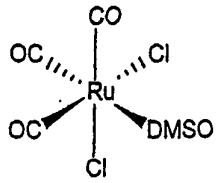
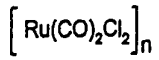
Compound	Structure	MW	CO Release (20 µmoles)				CO Release (40 µmoles)				NOTES
			0	10	20	30	0	10	20	30	
CO-RM-1		512	12.0 ±3.0	16.3 ±4.0	18.1 ±4.3	18.5 ±4.8	28.5 ±0.4	32.0 ±0.2	34.5 ±0.5	35.6 ±0.4	Soluble in DMSO
CO-RM-1a		384	7.2 ±0.6	8.6 ±0.3	8.0 ±0.4	7.5 ±0.4	16.9 ±0.6	18.4 ±0.3	17.3 ±0.3	16.7 ±0.2	Soluble in DMSO
Negative control		484	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	Soluble in H_2O
CO-RM-1b		334	6.4 ±1.2	7.3 ±0.6	8.2 ±0.1	8.7 ±0.3	11.7 ±0.8	13.7 ±0.9	14.0 ±1.1	14.4 ±0.6	Soluble in DMSO
CO-RM-10		(228)	2.6 ±0.6	9.8 ±0.3	12.7 ±0.1	13.8 ±0.9	8.6 ±0.7	21.0 ±1.1	24.4 ±1.0	26.3 ±1.2	Soluble in DMSO

Fig. 5A

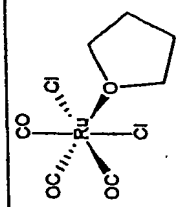
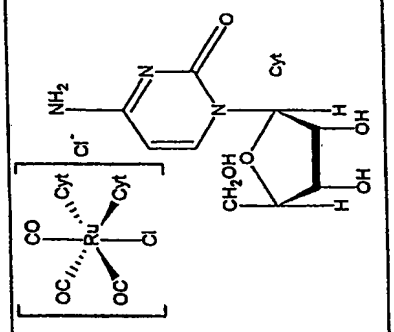
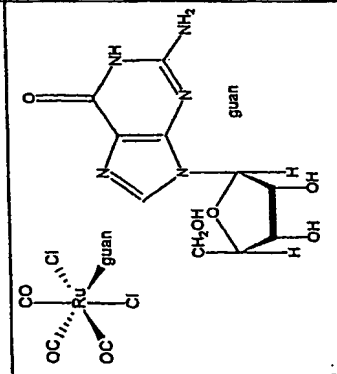
CO-RM-11 Ligand: THF		328	5.6 ±0.6	5.9 ±0.6	6.2 ±1.1	6.2 ±1.2	10.9 ±0.2	12.3 ±0.4	13.3 ±0.4	13.7 ±0.2	Soluble in DMSO
CO-RM-16 Ligand: Cytidine		742	N.D.	1.4 ±0.4	2.1 ±0.1	2.8 ±0.4	0.8 ±0.4	5.5 ±0.4	8.4 ±0.8	9.8 ±0.9	Soluble in H_2O
CO-RM-17 Ligand: Guanosine		539	5.9 ±0.1	8.2 ±0.4	8.5 ±0.3	8.6 ±0.4	11.5 ±0.4	15.0 ±0.4	15.6 ±0.4	16.2 ±0.3	Soluble in H_2O

Fig. 5B

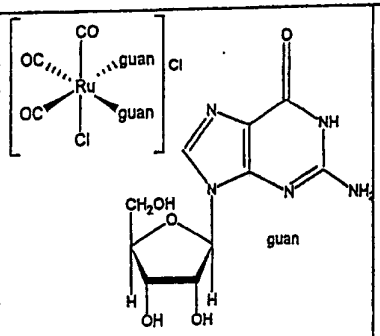
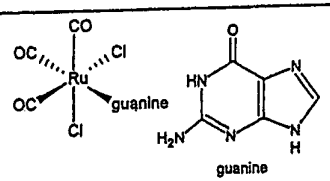
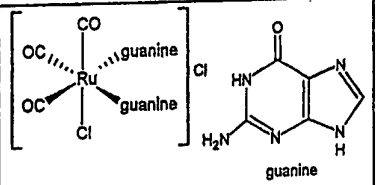
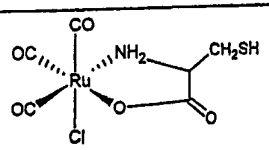
CO-RM-18 Ligand: Guanosine		822	10.1 ±0.9	14.3 ±0.4	14.1 ±0.5	13.5 ±0.4	25.4 ±1.0	29.5 ±1.5	29.5 ±1.4	28.7 ±1.3	Soluble in H_2O
CO-RM-22 Ligand: Guanine		407	0.1 ±0.1	0.8 ±0.3	1.0 ±0.3	2.3 ±0.1	0.7 ±0.1	1.9 ±0.1	2.3 ±0.1	2.4 ±0.1	Soluble in H_2O **PPT**
CO-RM-23 Ligand: Guanine		558	1.2 ±0.1	1.3 ±0.2	1.3 ±0.1	1.0 ±0.2	2.7 ±0.3	2.7 ±0.3	2.7 ±0.4	2.3 ±0.2	Soluble in H_2O **PPT**
CO-RM-26 Ligand: Cysteine		340.5	0.6 ±0.1	1.9 ±0.1	2.3 ±0.2	2.4 ±0.2	1.9 ±0.2	3.7 ±0.1	5.1 ±0.1	5.2 ±0.1	Soluble in H_2O

Fig. 5C

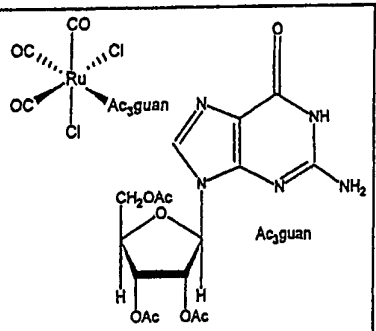
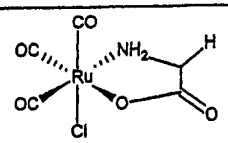
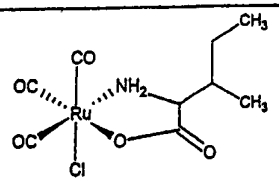
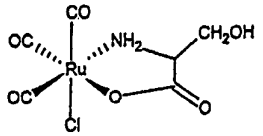
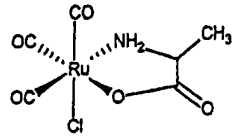
CO-RM-29 Ligand: Triacetyle-guanosine		665	1.4 ±0.7	4.5 ±0.1	5.0 ±0.1	3.2 ±0.1	8.3 ±0.6	11.7 ±0.3	12.4 ±0.1	10.6 ±0.4	Soluble in H_2O
CO-RM-3 Ligand: Glycine		294.5	14.2 ±0.6	17.8 ±0.7	14.3 ±0.7	12.9 ±0.7	25.2 ±1.5	24.4 ±1.0	23.8 ±0.6	23.2 ±0.3	Soluble in H_2O
CO-RM-38 Ligand: Isoleucine		350.5	3.2 ±0.2	4.4 ±0.1	4.0 ±0.2	3.0 ±1.7	7.6 ±1.3	8.3 ±1.2	7.5 ±1.1	7.3 ±1.1	Soluble in H_2O
CO-RM-39 Ligand: Serine		324.5	11.0 ±.03	12.8 ±.09	11.4 ±1.1	10.8 ±.07	24.2 ±1.5	24.6 ±1.4	22.0 ±1.0	21.9 ±1.2	Soluble in H_2O
CO-RM-40 Ligand: Alanine		308.5	9.1 ±1.1	11.9 ±0.4	11.1 ±.03	11.0 ±0.2	20.2 ±.06	21.3 ±.09	19.9 ±.09	19.6 ±.09	Soluble in H_2O

Fig. 5D

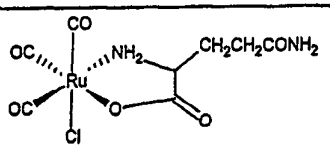
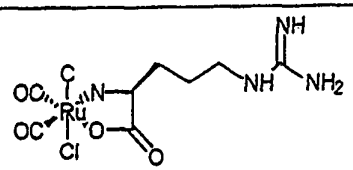
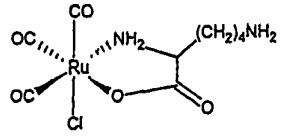
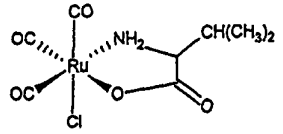
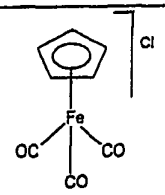
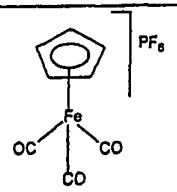
CO-RM-42 Ligand: Glutamine		365.5	8.9 ±0.4	11.1 ±0.4	12.1 ±1.4	10.1 ±0.3	21.4 ±2.1	21.8 ±2.2	20.6 ±2.0	20.0 ±1.8	Soluble in H_2O
CO-RM-43 Ligand: Arginine		393.5	9.4 ±1.4	11.9 ±0.5	12.3 ±0.7	11.0 ±0.3	18.3 ±.03	20.0 ±0.6	19.0 ±1.2	17.8 ±1.3	Soluble in H_2O
CO-RM-46 Ligand: Lysine		365.5	6.0 ±0.4	7.5 ±0.8	7.2 ±1.2	6.4 ±0.8	12.6 ±0.9	13.4 ±1.2	13.2 ±1.1	11.9 ±1.0	Soluble in H_2O
CO-RM-67 Ligand: L-valine		336.5	11.1 ±2.9	18.2 ±1.7	17.6 ±1.6	17.0 ±1.6	29.3 ±1.5	34.6 ±2.2	33.7 ±2.2	32.8 ±2.2	Soluble in H_2O
CO-RM-70		240	0.5 ±0.2	0.9 ±0.1	2.2 ±0.2	2.7 ±0.3	0.9 ±0.1	2.0 ±0.2	4.9 ±0.2	6.3 ±0.3	Soluble in DMSO **PPT**
CO-RM-71		350	1.5 ±0.2	2.3 ±0.3	3.1 ±0.4	3.7 ±0.4	3.4 ±0.1	5.4 ±0.3	6.9 ±0.3	7.6 ±0.4	*Soluble in* DMSO **PPT**

Fig. 5E

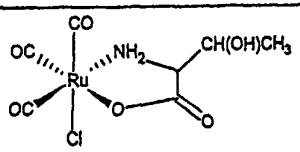
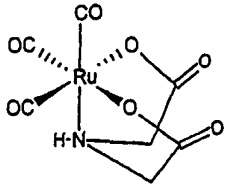
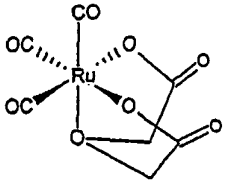
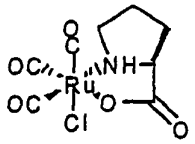
CO-RM-74 Ligand: L-Threonine		338.5	15.7 ±1.2	17.5 ±2.0	16.5 ±2.3	14.8 ±2.2	33.3 ±0.2	33.4 ±0.1	32.7 ±0.2	31.4 ±0.1	Soluble in H_2O
CO-RM-97		316	2.8 ± 0.6	7.0 ± 0.7	7.2 ± 0.9	6.6 ± 0.9	7.1 ± 0.5	14.3 ± 0.7	14.7 ± 0.8	13.6 ± 0.7	Soluble in H_2O
CO-RM-99		317	4.6 ± 0.6	8.1 ± 0.2	7.3 ± 0.3	5.5 ± 0.3	11.5 ±0.2	16.6 ± 0.2	16.0 ± 0.9	14.0 ± 0.2	Soluble in H_2O
CO-RM-H Ligand: L-proline		335	1.4 ± 0.3	4.7 ± 0.6	6.2 ± 0.8	6.3 ± 0.7	4.2 ±0.4	9.9 ± 0.2	12.5 ± 0.1	13.0 ± 0.1	Soluble in H_2O

Fig. 5F